CLAIMS

1. A Lactoferrin polypeptide characterized by comprising the amino acid sequence of phenylalanine (F), lysine (K) and aspartic acid (D).

2. The lactoferrin polypeptide according to claim 1 characterized in that its molecular weight is less than 25 kDa.

3. The lactoferrin polypeptide according to claim 1 or 2 characterized in that it can be obtained by digesting human lactoferrin with proteases.

4. The lactoferrin polypeptide according to claim 3 characterized in that said protease is elastase.

5. Inflammatory inducing substances based on the lactoferrin polypeptide according to any one of claims 1 to 4 wherein said lactoferrin-polypeptide has inducing activity for production of various inflammatory cytokines, and on the synthetic peptide thereof.

6. Inflammatory inducing substances based on the lactoferrin polypeptide according to any one of claims 1 to 4 wherein said lactoferrin-polypeptide has inducing activity for production of various chemokines, and on the synthetic peptide thereof.

7. Inflammatory inducing substances based on the the lactoferrin polypeptide according to any one of claims 1 to 4 wherein said lactoferrin polypeptide has enhancing effect for expression of NFκB, an intracellular transcription factor inducing production of inflammatory mediators such as cytokines and chemokines, and on the synthetic peptide thereof.

8. A production method for isolating and purifying lactoferrin polypeptide which comprise the amino acid sequence of phenylalanine (F), lysine (K) and aspartic acid (D) from human or bovine lactoferrin by digesting human or bovine lactoferrin with proteases and then purifying it.

9. The production method of a synthetic peptide characterized by determining the lactoferrin polypeptide according to claim 8 with amino acid sequencer and preparing the synthetic peptides.

10. The production method of the lactoferrin polypeptide according to claim 8, wherein said purification is characterized in that isolation and purification are carried out from saliva by SDS-polyacrylamide gel electrophoresis, gel filtration, concanavalin A (Con A) affinity chromatography and lactoferrin antibody attaching affinity chromatography.

11. The production method of the synthetic peptide according to claim 9 characterized in that said purification is carried out by SDS-polyacrylamide gel electrophoresis, gel filtration, concanavalin A (Con A) affinity chromatography and lactoferrin antibody attached affinity chromatography.